Location Date/Time Deaths & Property & Event Type and Details
Injuries Crop Dmg

ILLINOIS, South

WABASH COUNTY --- 1.4 E MT CARMEL [38.42, -87.74], 1.9 NE MT CARMEL [38.44, -87.74], 2.5 SSE PATTON [38.45, -87.73], 2.2 S PATTON [38.45, -87.74], 0.9 ENE MT CARMEL [38.42, -87.75]

 07/01/13 00:00 CST
 0
 Flood (due to Heavy Rain)

 07/05/13 10:00 CST
 30K
 Source: River/Stream Gage

Minor flooding continued from late June along the Wabash River in the Mount Carmel area. Many river cabins were inaccessible. Oil field producers stopped most production where pumping units were not on substructures. A county road along the river north of Mount Carmel flooded. Some cropland was flooded.

WHITE COUNTY --- MAUNIE [38.03, -88.05], 0.6 ENE MAUNIE [38.03, -88.04], 1.3 E MAUNIE [38.03, -88.03], 2.1 NNE RISING SUN [38.03, -88.01], 1.2 NNE RISING SUN [38.02, -88.02]

 07/01/13 00:00 CST
 0
 Flood (due to Heavy Rain)

 07/06/13 11:00 CST
 20K
 Source: River/Stream Gage

Minor flooding continued along the Wabash River from late June. Some cropland was flooded, along with a few county roads.

A very heavy rainfall event occurred in late June in portions of the Wabash Valley, including west central Indiana. In a 24-hour period from the evening of the 25th through the evening of the 26th, torrential rains of 3 to nearly 8 inches fell in upper portions of the Wabash basin. Severe flash flooding followed in portions of those areas. Flash flooding during the 26th quickly transitioned into lowland river flooding along portions of the Lower Wabash River. Additional heavy rain during the first few days of July prolonged the flooding.

EDWARDS COUNTY --- ALBION [38.38, -88.05]

07/01/13 08:00 CST 0 Heavy Rain

07/01/13 23:00 CST 0 Source: Trained Spotter

A trained spotter reported 4.04 inches of rain fell during the day and early evening. Storm total rainfall of 4.90 inches was reported by the general public. County Road 1300 North was flooded by the West Village Creek.

WAYNE COUNTY --- MT ERIE [38.52, -88.23], 2.0 S GOLDEN GATE [38.34, -88.21], 1.5 SSW BOYLESTON [38.35, -88.46], 1.7 SW CISNE [38.50, -88.45]

 07/01/13 08:00 CST
 0
 Flood (due to Heavy Rain)

 07/01/13 20:00 CST
 0
 Source: Trained Spotter

U.S. Highway 45 North was closed. Numerous county roads were covered by water. A trained spotter at Mount Erie reported five inches of rain in less than 12 hours.

WABASH COUNTY --- MT CARMEL [38.42, -87.77]

07/01/13 17:30 CST 0 Heavy Rain

07/01/13 20:00 CST 0 Source: Emergency Manager

Shallow standing water was reported over several county roads. Two roads in Mt. Carmel had standing water.

WABASH COUNTY --- 2.0 ENE BELLMONT [38.40, -87.89], 1.5 NE BELLMONT [38.40, -87.90]

07/01/13 18:41 CST 0 Tornado (EF0, L: 0.80 mi , W: 50 yd)

07/01/13 18:42 CST 0 Source: Storm Chaser

The tornado, just north of Bellmont, primarily impacted a grove of trees south of the Highway 15 and East 500th Road intersection. The tornado moved west, snapping tree branches and lofting them vertically as witnessed by a storm chaser. The storm chaser sent video of the tornado to the National Weather Service for review and confirmation. The storm chaser stated that other "fog columns" or low-hanging clouds were observed that day, but they did not rotate.

A few mini-supercells occurred beneath a 500 mb low centered over the Lower Ohio Valley. A surface trough axis extended from central Kentucky southward. A moist low level air mass combined with diurnal heating resulted in scattered thunderstorms. A few of these storms were mini-supercells, including one cell that produced a weak tornado. A larger cluster of showers and thunderstorms remained nearly stationary for several hours, producing locally very heavy rainfall amounts over four inches.

WAYNE COUNTY --- GOLDEN GATE [38.37, -88.20], 2.0 ENE MERRIAM [38.38, -88.24], 4.7 N GOLDEN GATE [38.44, -88.21], 4.3 NNE GOLDEN GATE [38.43, -88.18]

 07/01/13 20:00 CST
 0
 Flood (due to Heavy Rain)

 07/05/13 10:00 CST
 0
 Source: Trained Spotter

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The Little Wabash River flooded parts of Wayne County Route 3 in several locations. A trained spotter reported that the depth and speed of the current on both sides of the Little Wabash River bridge could wash vehicles from the bridge approaches.

WHITE COUNTY --- CARMI [38.08, -88.17], 1.7 SSE CARMI MUNI ARPT [38.08, -88.13], 2.4 SE CARMI [38.05, -88.14], 2.5 SSW CARMI [38.05, -88.18]

 07/02/13 14:00 CST
 5K
 Flood (due to Heavy Rain)

 07/16/13 14:00 CST
 0
 Source: River/Stream Gage

Moderate flooding occurred along the Little Wabash River near Carmi. The crest of 33.62 feet occurred on the afternoon of the 8th. Flood stage there is 27 feet. Low-lying areas near Routes 1 and 14 in Carmi began to flood. Some county roads were inundated.

Very heavy rain during the first few days of July caused rises on the Little Wabash River. A low in the upper levels of the atmosphere moved west across the Ohio Valley. A nearly stationary frontal boundary touched off several rounds of showers and thunderstorms. Tropical rains fell with high rainfall rates. Where the heaviest rains fell, totals were between 2 and 5 inches.

JEFFERSON COUNTY --- DIX [38.43, -88.93], 2.5 WNW BONNIE [38.22, -88.94], 3.1 NNW SCHELLER [38.22, -89.13], 1.1 WNW CRAVAT [38.42, -89.10]

 07/02/13 05:15 CST
 10K
 Flood (due to Heavy Rain)

 07/02/13 18:30 CST
 0
 Source: Trained Spotter

Numerous county roads were covered with water. Flooding of Drum Creek made roads impassable. Flooding of the Big Muddy River made at least one road impassable. Six inches of water was over Highway 148 in Waltonville. A trained spotter near Dix measured 4.50 inches of rain in the past 24 hours.

EDWARDS COUNTY --- 3.0 W WEST SALEM [38.52, -88.08]

07/02/13 15:33 CST 0 Heavy Rain

07/02/13 15:33 CST 0 Source: Trained Spotter

A trained spotter reported 5.10 inches of rain over the past three days.

JEFFERSON COUNTY --- 3.0 W MT VERNON [38.32, -88.96]

07/02/13 17:20 CST 0 Heavy Rain

07/02/13 17:20 CST 0 Source: Trained Spotter

A trained spotter reported 7 inches of rain over the past four days.

WAYNE COUNTY --- 5.5 SSW MT ERIE [38.45, -88.28], 4.9 SSW MT ERIE [38.46, -88.28]

07/02/13 17:55 CST 0 Tornado (EF0, L: 0.67 mi , W: 50 yd)

07/02/13 17:56 CST 0 Source: Storm Chaser

The storm chaser witnessed the relatively weak tornado circulation about seven miles northeast of Fairfield as it briefly touched down, causing little to no damage aside from vegetation aggravation. This feature actually began as a slowly rising fog column that was visually non-tornadic. However, the rising motion in the column gradually increased, followed by the gradual onset of rotation. The storm chaser sent video of the tornado to the National Weather Service for review and confirmation. The storm chaser stated that other "fog columns" or low-hanging clouds were observed that day, but they did not rotate

A mini-supercell occurred in the vicinity of a 500 mb low centered over the middle Mississippi Valley. A surface low pressure center was located near Louisville, Kentucky. A moist low level air mass combined with diurnal heating resulted in isolated showers and thunderstorms. One of these storms was a mini-supercell which produced a weak tornado. During the early morning hours, a stationary cluster of showers and thunderstorms produced flooding of creeks and small rivers.

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Photo of a weak tornado north of Fairfield in Wayne County, courtesy of Dan Robinson.

WAYNE COUNTY --- WAYNE CITY [38.35, -88.58], 1.1 SW ORCHARDVILLE [38.49, -88.67], 3.5 SW ORCHARDVILLE [38.47, -88.70], 1.7 W WAYNE CITY [38.35, -88.61]

07/03/13 03:00 CST 0 Flood (due to Heavy Rain) 07/04/13 23:00 CST 30K Source: River/Stream Gage

Minor flooding occurred along the Skillet Fork River. Low-lying fields, woodlands, and county roads were inundated.

Very heavy rain during the first few days of July caused rises on the Skillet Fork River. A low in the upper levels of the atmosphere moved west across the Ohio Valley. A nearly stationary frontal boundary touched off several rounds of showers and thunderstorms. Tropical rains fell with high rainfall rates. Where the heaviest rains fell, totals were between 2 and 5 inches.

FRANKLIN COUNTY --- SESSER [38.10, -89.05], 2.0 S SESSER [38.07, -89.05]

07/06/13 21:03 CST 0 Hail (0.75 in)

07/06/13 21:09 CST 0 Source: Trained Spotter

Also, some tree limbs were down within the city limits.

Isolated strong thunderstorms developed underneath a pocket of cold air associated with a low in the upper levels of the atmosphere. At the surface, southerly winds on the back side of high pressure over the southern Appalachians brought warmth and moisture.

ALEXANDER COUNTY --- 2.4 ESE CAIRO [36.98, -89.14], 1.2 E CAIRO [37.00, -89.16], 1.1 ESE CAIRO [37.00, -89.16], 2.3 ESE CAIRO [36.98, -89.14]

 07/07/13 06:00 CST
 0
 Flood (due to Heavy Rain)

 07/18/13 12:00 CST
 0
 Source: River/Stream Gage

Minor flooding occurred along the Ohio River near Cairo. Some low-lying fields, river access roads, and a state park were flooded.

PULASKI COUNTY --- 2.9 S NEW GRAND CHAIN [37.21, -89.01], 1.3 E OLMSTED [37.18, -89.06], 1.1 ENE OLMSTED [37.19, -89.06], 2.2 E LEVINGS [37.22, -89.03]

 07/08/13 04:00 CST
 0
 Flood (due to Heavy Rain)

 07/17/13 18:00 CST
 0
 Source: River/Stream Gage

Minor flooding occurred along the Ohio River near Grand Chain. Low-lying fields, woodlands, and river access roads were flooded.

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Deaths &

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Heavy rainfall across portions of the Mississippi Valley east into the Lower Ohio Valley during the last week of June caused rises on the Ohio River. The lowest portions of the Ohio River below Paducah climbed above flood stage.

HAMILTON COUNTY --- MC LEANSBORO [38.10, -88.53]

07/20/13 17:15 CST

0 Heavy Rain

A thunderstorm produced one inch of rain in ten minutes.

Location

Slow-moving clusters of thunderstorms formed along a cold front as it drifted southeast across southern Illinois. The storms produced torrential rainfall.

07/20/13 17:25 CST

Date/Time

GALLATIN COUNTY --- 2.0 S JUNCTION [37.69, -88.23], 2.6 ENE BOWLESVILLE [37.69, -88.18], 4.3 NNE SHAWNEETOWN [37.76, -88.11], 2.5 ESE RIDGWAY [37.77, -88.23], 1.9 WSW RIDGWAY [37.77, -88.30], 2.5 SSW LAWLER [37.70, -88.30]

07/21/13 18:13 CST 0

0 Flash Flood (due to Heavy Rain)

Event Type and Details

Source: Trained Spotter

07/21/13 20:45 CST 0 Source: Trained Spotter

0

Many secondary roads were under water, as well as State Routes 1 and 13. Highway 13 was completely under water from Shawneetown west to Junction. A trained spotter two miles south of Junction measured 3.90 inches. Over three inches of rainfall were reported in Ridgway.

WHITE COUNTY --- 2.0 E ENFIELD [38.10, -88.29], 2.0 W ENFIELD [38.10, -88.37], 2.0 W NORRIS CITY [37.98, -88.36], 2.0 E NORRIS CITY [37.98, -88.28]

07/21/13 18:20 CST 0 Flash Flood (due to Heavy Rain)

07/21/13 19:05 CST 0 Source: Trained Spotter

U.S. Highway 45 was under water between Enfield and Norris City.

SALINE COUNTY --- RILEYVILLE [37.85, -88.67]

07/21/13 18:50 CST 0 Heavy Rain

07/21/13 19:45 CST 0 Source: Trained Spotter

Thunderstorms with heavy rainfall caused water to cover Highway 34.

FRANKLIN COUNTY --- CHRISTOPHER [37.97, -89.05]

07/21/13 19:00 CST 5K Heavy Rain

07/21/13 20:00 CST 0 Source: Trained Spotter

Two feet of water was over Illinois Route 14 on the east side of Christopher. Several vehicles stalled out. In the city of Christopher, 6 to 12 inches of water covered many roads. West of Christopher, several inches of water was flowing across Illinois Route 14.

Large clusters of thunderstorms with torrential downpours moved slowly north along a warm front. The storms were enhanced by a 500 mb shortwave trough digging southeast across the Missouri Valley. Precipitable water values were very close to 2 inches.

INDIANA, Southwest

GIBSON COUNTY --- 1.0 NW HAZLETON [38.49, -87.54], 1.3 N HAZLETON [38.50, -87.53], 1.8 NE HAZLETON [38.50, -87.51], 1.2 NE HAZLETON [38.49, -87.51]

 07/01/13 00:00 CST
 2K
 Flood (due to Heavy Rain)

 07/02/13 09:00 CST
 20K
 Source: River/Stream Gage

Minor flooding continued from late June along the White River in the Hazleton area. Floodwaters covered low farmland. Low-lying oil fields and a few low rural roads were flooded. High water isolated a river cabin community.

GIBSON COUNTY --- EAST MT CARMEL [38.40, -87.73], 1.0 WNW EAST MT CARMEL [38.40, -87.75], 2.1 NNE SKELTON [38.38, -87.77], 2.0 SW EAST MT CARMEL [38.38, -87.75]

 07/01/13 00:00 CST
 5K
 Flood (due to Heavy Rain)

 07/05/13 12:00 CST
 20K
 Source: River/Stream Gage

Minor flooding continued from late June along the Wabash River in the East Mount Carmel area. Many river cabins became inaccessible. Oil field producers stopped most production where pumping units were not on substructures. A few river access roads along the river were flooded. Some cropland was flooded.

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PIKE COUNTY PETERSBURG [38.50, -8 [38.51, -87.28]		Injuries	Crop Dmg	
[30.31, -07.23]	7.28], 3.5 NE PETERSBURG [38.54,	-87.24], 3.5 NE PET	TERSBURG [3	8.54, -87.24], 0.9 NNW PETERSBURG
	07/01/13 00:00 EST		0	Flood (due to Heavy Rain)
	07/01/13 15:00 EST		30K	Source: River/Stream Gage
Minor flooding continued from late June alor county roads east of State Route 57: 750N, 700W, and 775W. Flooding affected low agr	600N, and 1000E. Pike County roads		-	were flooded, including the following 250W, 400W, 675N, 700N, 1000W, 900W,
POSEY COUNTY NEW HARMONY [38.1: HARMONY [38.16, -87.91]	3, -87.93], 0.5 WNW NEW HARMONY	Y [38.13, -87.94], 2.2	2 N NEW HAR	MONY [38.16, -87.93], 2.5 NNE NEW
TACINON 1 [30.10, -07.91]	07/01/13 00:00 CST		0	Flood (due to Heavy Rain)
	07/06/13 11:00 CST		10K	Source: River/Stream Gage
Minor flooding continued from late June alor cropland was flooded.	ng the Wabash River near New Harm	ony. A few river acc	cess roads alo	ong the river were flooded. Some
into lowland river flooding along portions along the Wabash. The river flooding ende GIBSON COUNTY MACKEY [38.25, -87.3	ed in early July along the Lower Whi 38], 1.8 SSW BUCKSKIN [38.21, -87.	ite and Wabash Riv	vers in south	west Indiana. 37.45], 1.6 N BUCKSKIN [38.25, -87.42]
	07/01/13 18:15 CST		0	Flood (due to Heavy Rain)
			0	Source: Trained Spotter
A slow-moving cluster of showers and thu trough axis extended from central Kentucl	understorms occurred beneath a 500 ky southward. A moist low level air	mass combined w	ith diurnal hea	ating resulted in clusters
A slow-moving cluster of showers and thu rough axis extended from central Kentucl of thunderstorms. A larger cluster of show neavy rainfall amounts.	way 57. understorms occurred beneath a 500 ky southward. A moist low level air wers and thunderstorms remained n	mass combined w	ith diurnal hea	ating resulted in clusters
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SPENCER COUNTY --- 1.0 SW ROCKPORT [37.87, -87.06]

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Deaths &

Injuries

Property &

Crop Dmg

Event Type and Details

Date/Time

Location

	07/23/13 17:55 CST	0	Hail (0.88 in)
	07/23/13 17:55 CST	0	Source: Trained Spotter
Pea to nickel-size hail was reported.			
·			
VANDERBURGH COUNTY 2.0 WNW EVANS		FIZ	Thursdays Mind (FO 54 Lt)
	07/23/13 18:09 CST	5K	Thunderstorm Wind (EG 51 kt)
	07/23/13 18:09 CST	0	Source: Law Enforcement
A large tree limb and some power lines were dow	n.		
A cluster of thunderstorms organized into a me	esoscale convective system under mod	lerately strong northw	vest flow aloft. The storms
developed along a cold front as it moved south	east into the Lower Ohio Valley. A cou	ple of the storms prod	duced hail and wind near
severe criteria.			
KENTHOKY Southwoot			
KENTUCKY, Southwest			
CHRISTIAN COUNTY CROFTON [37.05, -87.4	[8]		
	07/05/13 22:00 CST	0	Heavy Rain
	07/06/13 00:15 CST	0	Source: Emergency Manager
Four inches of water covered U.S. Highway 41.			
our mones of water covered 0.0. Highway 41.			
GRAVES COUNTY 0.5 N MAYFIELD [36.74, -	38.63]		
	07/06/13 16:58 CST	40K	Thunderstorm Wind (EG 52 kt)
	07/06/13 16:58 CST	0	Source: Emergency Manager
BALLARD COUNTY 1.0 S KEVIL [37.07, -88.9	07/06/13 17:10 CST	20K	Thunderstorm Wind (EG 61 kt)
	07/06/13 17:10 CST	0	Source: NWS Storm Survey
-	side walls of an equipment shed were b	lown in approximately a	a foot. Several large tree limbs were blown
_	side walls of an equipment shed were bi	lown in approximately ε	a toot. Several large tree limbs were blown
down.	LLE ARPT [37.03, -88.32]		•
down.	LLE ARPT [37.03, -88.32] 07/06/13 17:55 CST	0	Hail (0.88 in)
down.	LLE ARPT [37.03, -88.32]		•
down. MARSHALL COUNTY 1.3 WNW GILBERTSVI	LLE ARPT [37.03, -88.32] 07/06/13 17:55 CST 07/06/13 17:55 CST	0	Hail (0.88 in)
down. MARSHALL COUNTY 1.3 WNW GILBERTSVI	LLE ARPT [37.03, -88.32] 07/06/13 17:55 CST 07/06/13 17:55 CST	0	Hail (0.88 in)
down. MARSHALL COUNTY 1.3 WNW GILBERTSVI	07/06/13 17:55 CST 07/06/13 17:55 CST 07/06/13 17:55 CST	0	Hail (0.88 in) Source: Trained Spotter
MARSHALL COUNTY 1.3 WNW GILBERTSVI	07/06/13 17:55 CST 07/06/13 17:55 CST 07/06/13 17:55 CST 37.03, -88.31] 07/06/13 17:59 CST	0 0	Hail (0.88 in) Source: Trained Spotter Heavy Rain
MARSHALL COUNTY 1.3 WNW GILBERTSVI	07/06/13 17:55 CST 07/06/13 17:55 CST 07/06/13 17:55 CST 37.03, -88.31] 07/06/13 17:59 CST	0 0	Hail (0.88 in) Source: Trained Spotter Heavy Rain
MARSHALL COUNTY 1.3 WNW GILBERTSVI MARSHALL COUNTY 2.0 E CALVERT CITY [One road was covered with water.	07/06/13 17:55 CST 07/06/13 17:55 CST 07/06/13 17:55 CST 37.03, -88.31] 07/06/13 17:59 CST 07/06/13 20:30 CST	0 0 0 0	Hail (0.88 in) Source: Trained Spotter Heavy Rain Source: Trained Spotter
MARSHALL COUNTY 1.3 WNW GILBERTSVI MARSHALL COUNTY 2.0 E CALVERT CITY [One road was covered with water.	07/06/13 17:55 CST 07/06/13 17:55 CST 07/06/13 17:55 CST 37.03, -88.31] 07/06/13 17:59 CST 07/06/13 20:30 CST (36.85, -87.93], 1.7 S TRIGG FURNACE 07/06/13 18:50 CST	0 0 0 0 0 [36.86, -87.92] 5K	Hail (0.88 in) Source: Trained Spotter Heavy Rain Source: Trained Spotter Tornado (EF0, L: 0.89 mi , W: 50 yd)
MARSHALL COUNTY 1.3 WNW GILBERTSVI MARSHALL COUNTY 2.0 E CALVERT CITY [One road was covered with water.	07/06/13 17:55 CST 07/06/13 17:55 CST 07/06/13 17:55 CST 37.03, -88.31] 07/06/13 17:59 CST 07/06/13 20:30 CST	0 0 0 0	Hail (0.88 in) Source: Trained Spotter Heavy Rain Source: Trained Spotter
MARSHALL COUNTY 1.3 WNW GILBERTSVI MARSHALL COUNTY 2.0 E CALVERT CITY [One road was covered with water. TRIGG COUNTY 2.0 SSW TRIGG FURNACE	07/06/13 17:55 CST 07/06/13 17:55 CST 07/06/13 17:55 CST 37.03, -88.31] 07/06/13 17:59 CST 07/06/13 20:30 CST (36.85, -87.93], 1.7 S TRIGG FURNACE 07/06/13 18:50 CST 07/06/13 18:51 CST	0 0 0 0 0 [36.86, -87.92] 5K 0	Hail (0.88 in) Source: Trained Spotter Heavy Rain Source: Trained Spotter Tornado (EF0, L: 0.89 mi , W: 50 yd) Source: Trained Spotter
One small farm building was overturned, and the down. MARSHALL COUNTY 1.3 WNW GILBERTSVI MARSHALL COUNTY 2.0 E CALVERT CITY [One road was covered with water. TRIGG COUNTY 2.0 SSW TRIGG FURNACE A trained spotter witnessed a tornado move into lestimated near 65 mph.	07/06/13 17:55 CST 07/06/13 17:55 CST 07/06/13 17:55 CST 37.03, -88.31] 07/06/13 17:59 CST 07/06/13 20:30 CST (36.85, -87.93], 1.7 S TRIGG FURNACE 07/06/13 18:50 CST 07/06/13 18:51 CST	0 0 0 0 0 [36.86, -87.92] 5K 0	Hail (0.88 in) Source: Trained Spotter Heavy Rain Source: Trained Spotter Tornado (EF0, L: 0.89 mi , W: 50 yd) Source: Trained Spotter
MARSHALL COUNTY 1.3 WNW GILBERTSVI MARSHALL COUNTY 2.0 E CALVERT CITY [One road was covered with water. FRIGG COUNTY 2.0 SSW TRIGG FURNACE A trained spotter witnessed a tornado move into lestimated near 65 mph.	07/06/13 17:55 CST 07/06/13 17:55 CST 07/06/13 17:55 CST 37.03, -88.31] 07/06/13 17:59 CST 07/06/13 20:30 CST (36.85, -87.93], 1.7 S TRIGG FURNACE 07/06/13 18:50 CST 07/06/13 18:51 CST	0 0 0 0 [36.86, -87.92] 5K 0	Hail (0.88 in) Source: Trained Spotter Heavy Rain Source: Trained Spotter Tornado (EF0, L: 0.89 mi , W: 50 yd) Source: Trained Spotter nto power lines. Peak winds were
MARSHALL COUNTY 1.3 WNW GILBERTSVI MARSHALL COUNTY 2.0 E CALVERT CITY [One road was covered with water. TRIGG COUNTY 2.0 SSW TRIGG FURNACE A trained spotter witnessed a tornado move into lestimated near 65 mph.	07/06/13 17:55 CST 07/06/13 17:55 CST 07/06/13 17:55 CST 37.03, -88.31] 07/06/13 17:59 CST 07/06/13 20:30 CST (36.85, -87.93], 1.7 S TRIGG FURNACE 07/06/13 18:50 CST 07/06/13 18:51 CST Lake Barkley State Resort Park. Large tr I [36.60, -88.19], 2.3 S MURRAY [36.59, ORD [36.59, -88.13]	0 0 0 0 136.86, -87.92] 5K 0 ee limbs were blown or	Hail (0.88 in) Source: Trained Spotter Heavy Rain Source: Trained Spotter Tornado (EF0, L: 0.89 mi , W: 50 yd) Source: Trained Spotter nto power lines. Peak winds were
MARSHALL COUNTY 1.3 WNW GILBERTSVI MARSHALL COUNTY 2.0 E CALVERT CITY [One road was covered with water. TRIGG COUNTY 2.0 SSW TRIGG FURNACE	07/06/13 17:55 CST 07/06/13 17:55 CST 07/06/13 17:55 CST 37.03, -88.31] 07/06/13 17:59 CST 07/06/13 20:30 CST 36.85, -87.93], 1.7 S TRIGG FURNACE 07/06/13 18:50 CST 07/06/13 18:51 CST Lake Barkley State Resort Park. Large tr	0 0 0 0 [36.86, -87.92] 5K 0	Hail (0.88 in) Source: Trained Spotter Heavy Rain Source: Trained Spotter Tornado (EF0, L: 0.89 mi , W: 50 yd) Source: Trained Spotter nto power lines. Peak winds were

A section of U.S. Highway 641 was closed. Several motorists were stranded. These motorists were helped from their vehicles. South of Murray, a section of Highway 121 was closed between mile markers 3 and 4. Just south of the Murray city limits, several secondary roads had high water signs posted, and traffic was not allowed through. This included Highway 1497.

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Date/Time Deaths & **Event Type and Details** Location Property & Injuries Crop Dma A complex of thunderstorms developed underneath a pocket of cold air associated with a low in the upper levels of the atmosphere. At the surface, southerly winds on the back side of high pressure over the southern Appalachians brought warmth and moisture. A few of the storms produced severe weather. The complex of thunderstorms moved slowly, causing very heavy rainfall and flash flooding over parts of the Lakes region. MUHLENBERG COUNTY --- PARADISE [37.27, -86.98], 0.4 W PARADISE [37.27, -86.99], 1.9 NNW PARADISE [37.30, -86.99], 1.8 N PARADISE [37.30, -86.98] 07/07/13 07:00 CST Flood (due to Heavy Rain) 07/11/13 12:00 CST 0 Source: River/Stream Gage Minor flooding occurred along the Green River near Paradise. Low-lying fields and woodlands were inundated. Thunderstorms with heavy rain during the first week of July caused rises on the Green River. A low in the upper levels of the atmosphere moved west across the Ohio Valley. A nearly stationary frontal boundary touched off several rounds of showers and thunderstorms. Tropical rains fell with high rainfall rates. Where the heaviest rains fell, totals were between 2 and 4 inches. CALDWELL COUNTY --- 1.1 WNW HOPSON [36.99, -87.85] 2K Thunderstorm Wind (EG 52 kt) 07/18/13 11:43 CST 07/18/13 11:43 CST 0 Source: Emergency Manager Large tree limbs were blown down. CALLOWAY COUNTY --- 0.2 SW KIRKSEY [36.70, -88.38] 07/18/13 11:50 CST 0.10M Thunderstorm Wind (EG 83 kt) 07/18/13 11:50 CST 0 Source: Emergency Manager A microburst centered in the southwest part of Kirksey affected an area about 1.5 miles wide. About two dozen structures were damaged, and about 50 trees were blown down. Trees landed across roads and houses. Small sections of roof decking were blown off a few structures. At least two windows were blown out. Estimated peak winds based on damage photos were 95 mph. CHRISTIAN COUNTY --- GRACEY [36.87, -87.65] 07/18/13 14:55 CST 0 Thunderstorm Wind (MG 51 kt) 07/18/13 14:55 CST 0 Source: Trained Spotter Small and medium-size tree limbs were blown down by a wind gust measured at 59 mph. DAVIESS COUNTY --- 5.0 W OWENSBORO [37.77, -87.21] 07/18/13 16:30 CST 0 Funnel Cloud 07/18/13 16:33 CST n Source: Trained Spotter There were several funnel cloud sightings west of Owensboro. Isolated thunderstorms pulsed up to severe levels during the heat of the afternoon. The storms developed on the northern fringe of an upper-level trough over the South. The wind flow near the surface was very weak. MARSHALL COUNTY --- BENTON [36.87, -88.35] 07/21/13 16:20 CST Heavy Rain 07/21/13 17:20 CST 0 Source: NWS Employee Strong thunderstorms produced torrential rainfall that caused minor urban and street flooding. CHRISTIAN COUNTY --- 3.6 SW HONEY GROVE [36.85, -87.35], 2.6 ESE CASKY [36.81, -87.39], 0.4 NNE CASKY [36.83, -87.43], 4.2 W HONEY GROVE [36.88, -87.38] 07/22/13 08:00 CST 0 Flood (due to Heavy Rain) 07/22/13 10:00 CST 0 Source: River/Stream Gage Minor flooding occurred on the south fork of the Little River on the eastern outskirts of Hopkinsville. Low-lying fields and woodlands along the river were flooded. The flooding occurred in response to a couple of thunderstorms the previous night. A cluster of thunderstorms with torrential downpours moved slowly north along a warm front. The storms were enhanced by a 500 mb

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shortwave trough digging southeast across the Missouri Valley. Precipitable water values were very close to 2 inches.

DAVIESS COUNTY --- 2.8 N (OWB)OWENSBORO ARPT [37.79, -87.18]

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	07/23/13 18:09 CST 07/23/13 18:09 CST		0	Hail (1.00 in)
				Source: Law Enforcement
HENDERSON COUNTY CORYDON [37	7.73, -87.70]			
	07/23/13 18:25 CST		25K	Thunderstorm Wind (EG 52 kt)
	07/23/13 18:40 CST		0	Source: Emergency Manager
Several trees were reported down in the c	ommunity of Corydon. A large tree a	nd power lines we	re down in the com	munity of Smith Mills.
MCLEAN COUNTY BEECH GROVE [3	•			
	07/23/13 19:13 CST		0	Hail (0.88 in)
	07/23/13 19:13 CST		0	Source: Public
HOPKINS COUNTY 3.0 N MADISONVI	LLE [37.37, -87.50]			
	07/23/13 19:19 CST		0	Funnel Cloud
	07/23/13 19:19 CST		0	Source: Trained Spotter
A trained spotter reported a funnel cloud v	vith broad, weak rotation.			
UNION COUNTY 0.9 SE CULLEN [37.5	i7, -87.87]			
	07/23/13 19:25 CST		10K	Thunderstorm Wind (EG 52 kt)
	07/23/13 19:25 CST		0	Source: Law Enforcement
Trees were down along Highway 141.				
UNION COUNTY 3.0 N MORGANFIELD	- · · · · · · · · · · · · · · · · · · ·	FIELD [37.58, -88.0	-	
	07/23/13 19:25 CST		75K	Thunderstorm Wind (EG 74 kt)
	07/23/13 19:40 CST		0.10M	Source: NWS Storm Survey

Scattered wind damage extended from about three miles north of Morganfield to Morganfield, and then extended southwest to about ten miles southwest of Morganfield around Kentucky Highway 109. Dozens of trees were uprooted. Trees and power lines were blown down throughout the east side of Morganfield. Several barns and small sheds were damaged by winds estimated up to 85 mph. Large sections of roofing were blown off at least a couple barns. Numerous areas of corn were blown down. The majority of the damage was from Morganfield west and southwest.

A mesoscale convective system organized over the Lower Ohio Valley along a southeast-moving cold front. Moderately strong northwest winds aloft and seasonably strong instability contributed to the strength of the system. A gust front along the leading edge of the thunderstorm complex accelerated south and southwestward across the northwest Kentucky counties of Union and Henderson. This gust front produced areas of wind damage in those counties.

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